

# Contents of *Aquaculture*, Volume 101

**VOL. 101 NOS. 1/2**

**1 FEBRUARY 1992**

## **Diseases, Parasites and Predators**

- Longevity of *Edwardsiella ictaluri* in the organs of experimentally infected channel catfish, *Ictalurus punctatus*  
T.N. Mqolomba and J.A. Plumb (Auburn, AL, USA) ..... 1

## **Husbandry and Management**

- Experimental tank cultivation of *Gracilaria chilensis* in central Chile  
R. Ugarte and B. Santelices (Santiago, Chile) ..... 7
- The biology of snakehead, *Channa obscura* (Gunther), in a Nigerian pond under monoculture  
R. Victor (Al Khod, Oman) and B.O. Akpocha (Benin City, Nigeria) ..... 17
- Growth and survival of *Penaeus monodon* juveniles fed a diet lacking vitamin supplements in a modified extensive culture system  
A.T. Triño, V.D. Peñaflorida and E.C. Bolivar (Iloilo, Philippines) ..... 25
- Combined intensive-extensive (CIE) pond system. A: inorganic nitrogen transformations  
S. Diab, M. Kochba (Haifa, Israel), D. Mires (Ashrate, Israel) and Y. Avnimelech (Haifa, Israel) ..... 33
- Respiration and energetics in mussels (*Mytilus edulis* L.) cultured in the White Sea  
A.A. Sukhotin (Leningrad, USSR) ..... 41
- Growth and population dynamics in mussels (*Mytilus edulis* L.) cultured in the White Sea  
A.A. Sukhotin and E.E. Kulakowski (Leningrad, USSR) ..... 59

## **Nutrition**

- The composition of *Zostera capricorni* seeds: a seasonal natural food of juvenile *Penaeus esculentus* Haswell (Penaeidae: Decapoda)  
W. Dall, D.M. Smith and L.E. Moore (Cleveland, Qld., Australia) ..... 75
- Supplemental effects of methionine-enriched plastein in *Penaeus japonicus* diets  
S. Teshima, A. Kanazawa and S. Koshio (Kagoshima, Japan) ..... 85
- Requirements for sulfur amino acids and utilization of D-methionine by rainbow trout (*Oncorhynchus mykiss*)  
K.-I. Kim (Cheju, South Korea), T.B. Kayes and C.H. Amundson (Madison, WI, USA) ..... 95
- Essential fatty acid nutrition of larval striped bass (*Morone saxatilis*) and palmetto bass (*M. saxatilis* × *M. chrysops*)  
H. Tuncer and R.M. Harrell (Cambridge, MD, USA) ..... 105
- Pigmentation of rainbow trout with astaxanthin and canthaxanthin in freshwater and saltwater  
H.K. No and T. Storebakken (Sunndalsøra, Norway) ..... 123
- Feeding behaviour and effect of feeding regime on growth of Atlantic salmon, *Salmo salar*  
E.H. Jørgensen and M. Jobling (Tromsø, Norway) ..... 135
- Effects of winter temperature and feeding regime on the rate of early maturation in Atlantic salmon (*Salmo salar*) male parr  
C.M. Herbingier and G.W. Friars (St. Andrews, N.B., Canada) ..... 147

- Effects of dietary conditions on the exocrine pancreas of the sea bass, *Dicentrarchus labrax* L.  
(Teleostei)  
C. Beccaria, J.P. Diaz and R. Connes (Montpellier, France) ..... 163

#### Physiology and Endocrinology

- Assessment of sperm concentration and motility in turbot (*Scophthalmus maximus*)  
M. Suquet, M.H. Omnes, Y. Normant and C. Fauvel (Plouzané, France) ..... 177

#### Short Communication

- Induced spawning of the scallop, *Pecten maximus*, in the sea  
D. Minchin (Dublin, Ireland) ..... 187

- Guide for Authors ..... 191

### VOL. 101 NOS. 3/4

15 FEBRUARY 1992

#### Diseases, Parasites and Predators

- Protective effect of schizophyllan and scleroglucan against *Streptococcus* sp. infection in  
yellowtail (*Seriola quinqueradiata*)  
H. Matsuyama, R.E.P. Mangindaan and T. Yano (Fukuoka, Japan) ..... 197
- Development of an in vitro primary cell culture system from the penaeid shrimp, *Penaeus*  
*stylirostris* and *Penaeus vannamei*  
R.A. Luedeman and D.V. Lightner (Tucson, AZ, USA) ..... 205

#### Husbandry and Management

- Substitution of organic manure for pelleted feed in tilapia production  
B.W. Green (Auburn, AL, USA) ..... 213

#### Nutrition

- Effect of algal diets on the fatty acid composition of brine shrimp, *Artemia* sp., cysts  
J.C. Navarro and F. Amat (Castellon, Spain) ..... 223
- The relative enhancement of *Penaeus vannamei* growth by selected fractions of shrimp pond  
water  
S.M. Moss, G.D. Pruder, K.M. Leber and J.A. Wyban (Honolulu, HI, USA) ..... 229
- Utilization of different carbohydrates at different dietary protein levels in grass prawn,  
*Penaeus monodon*, reared in seawater  
S.-Y. Shiau and C.-Y. Peng (Keelung, Taiwan) ..... 241
- Nutrient profiles of green and decomposed rice-forages and their utilization by juvenile  
crayfish (*Procambarus clarkii*)  
W.R. McClain, W.H. Neill and D.M. Gatlin III (College Station, TX, USA) ..... 251
- Partitioning the contributions of forage-based production system components to weight gain  
of juvenile crayfish (*Procambarus clarkii*)  
W.R. McClain, W.H. Neill and D.M. Gatlin III (College Station, TX, USA) ..... 267
- Dietary protein requirement of the red drum (*Sciaenops ocellatus*) and relative use of dietary  
carbohydrate and lipid  
J.A. Serrano, G.R. Nematipour and D.M. Gatlin III (College Station, TX, USA) ..... 283
- Food conversion budget in sea bass, *Dicentrarchus labrax*, fingerlings under two different  
feeding frequency patterns  
N. Tsevis, S. Klaoudatos and A. Conides (Elliniko, Greece) ..... 293

#### Physiology and Endocrinology

- A relationship between adult recoveries of chinook salmon (*Oncorhynchus tshawytscha*) and

lunar phase at time of their release from a hatchery on the Rakaia River, New Zealand C.L. Hopkins (Christchurch, New Zealand) .....	305
Effects of cortisol and thyroid hormone treatment on the glycogen metabolism of selected tissues of domesticated rainbow trout, <i>Oncorhynchus mykiss</i> J.L. Soengas, P. Rey, G. Rozas, M.D. Andrés and M. Aldegunde (Santiago de Compostela, Spain) .....	317
Stimulation of ovulation in ayu, <i>Plecoglossus altivelis</i> , by treatment with antiestrogens and luteinizing hormone-releasing hormone analog C.-F. Chang, H.-J. Hu, H.-C. Tang and L.-T. Sun (Keelung, Taiwan) .....	329
Oocyte maturation and changes in plasma steroid levels in snapper <i>Pagrus</i> (= <i>Chrysophrys</i> ) <i>auratus</i> (Sparidae) following treatment with human chorionic gonadotropin N.W. Pankhurst and J.F. Carragher (Auckland, New Zealand) .....	337
Embryonic and larval development of the thick-lipped mullet ( <i>Chelon labrosus</i> ) under controlled reproduction conditions C. Boglione, B. Bertolini, M. Russiello and S. Cataudella (Rome, Italy) .....	349
Mosquitofish reproduction: effects of photoperiod and nutrition J.J. Cech Jr., R.G. Schwab, W.C. Coles and B.B. Bridges (Davis, CA, USA) .....	361
The reproductive biology of the tropical rocky oyster <i>Ostrea iridescens</i> (Bivalvia: Ostreidae) on the Pacific coast of Costa Rica M.-L. Fournier (San José, Costa Rica) .....	371
<b>Technical Papers</b>	
Automated maintenance of dissolved oxygen concentrations in flow-through aquaria M.S. Peterson and B.E. Ardahl (Mississippi State, MS, USA) .....	379
The randomness of samples collected by dip-net methods from rainbow trout in tanks M.A. Thorburn (Guelph, Ont., Canada) .....	385
<b>Book Reviews</b>	
Trout farming handbook .....	391
Cyprinid fishes .....	392
<b>Announcements</b> .....	394
<b>Author Index</b> .....	395
<b>Contents of <i>Aquaculture</i>, Volume 101</b> .....	399

